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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,325	11/12/2003	Pierre Rizzo	859063.548	2006

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EXAMINER	
DOAN, KIET M	

ART UNIT	PAPER NUMBER
2617	

DATE MAILED: 11/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/712,325	RIZZO ET AL.	
	Examiner	Art Unit	
	Kiet Doan	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 August 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-20 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This office action is response to Remarks file on 08/08/2006.

Claim 1amended.

Response to Arguments

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claim 1, 2, 5 are rejected under 35 U.S.C. 102(e) as being anticipated by MacLellan et al. (Patent No. 6,456,668).

Consider **claim 1**.MacLellan teaches an electromagnetic transponder intended to draw power necessary to its operation from a field radiated by a terminal of transmission of a carrier at a first frequency and to back-modulate a received signal at a rate of a sub-carrier at a second frequency lower than the first one, comprising means for demodulating signals modulated by said sub-carrier and means for decoding said signals (Abstract, C2, L6-21, C3, L8-67, C4, L1-20, Fig.3, Illustrate tag 105 as read on transponder receiving power and signal from interrogator wherein tag generate sub-carrier (MBS technologies) and demodulated/decoding signal).

Consider **claim 2**. MacLellan teaches the transponder of claim 1, further comprising an oscillating circuit upstream of a rectifying means capable of providing a D.C. supply voltage to an electronic circuit , the electronic circuit having means for transmitting digitally-coded information, and the transponder comprising a demodulator capable of differentiating information received at a rate of a back-modulation sub-carrier of another transponder with respect to information received, at a rate of a third still lower frequency, from the terminal (C3, L10-67, C4, L1-15).

Consider **claim 5**. MacLellan teaches a system of contactless and wireless communication between at least two electromagnetic transponders having no independent power supply, wherein each transponder comprises means capable of drawing power necessary to a supply of its circuits from an electromagnetic field at a first frequency radiated by at least one read/write terminal, and means for demodulating and decoding signals transmitted by another transponder in modulation of a sub-carrier at a second frequency (C1, L40-64, C2, L57-67, C3, L1-8, Fig.1 Illustrate contactless as read on interrogator and communication between at least two electromagnetic transponders as read on Tags 105-107).

Claims 8-14, 16-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Ward, Jr. (Patent No. 6,943,680).

Consider **claims 8, 16, 19**. Ward teaches a transponder, comprising:

a first circuit to receive a first signal having a first frequency and to provide power from the first signal;

a second circuit coupled to the first circuit to receive a second signal having a second frequency;

a third circuit coupled to the first circuit and coupled parallel to the second circuit to receive a third signal having a third frequency, the third signal being received from another transponder; and

a fourth circuit coupled to the second and third circuits to respectively process the demodulated second and third signals (Abstract, C7, L26-67, C8, L5-46, Fig.4-5 Illustrate first circuit as read on No.118/306, second circuit as read on No.180/346, third circuit as read on No.190/348 and fourth circuit as read on No.200/350).

Consider **claim 9**. Ward teaches the transponder of claim 8 wherein the first circuit includes:

a first capacitor and inductor connected in parallel;

a rectifier circuit having input terminals coupled to the parallel connection of the capacitor and inductor;

a second capacitor coupled to output terminals of the rectifier circuit; and

a voltage regulator coupled to the second capacitor and to the rectifier circuit (C2, L20-67, C10, L38-67, C11, L1-14).

Consider **claim 10**. Ward teaches the transponder of claim 8, further comprising a fifth circuit coupled to the first circuit to transmit a fourth signal (Fig.4-5, Illustrate No. 118/306 as first circuit).

Consider **claim 11**. Ward teaches the transponder of claim 10 wherein the fifth circuit includes a modulator having an output coupled to a transistor (Fig.4-5, Illustrate fifth circuit as read on No.170/344).

Consider **claim 12**. Ward teaches the transponder of claim 8, further comprising an analog unit coupled to the second and third circuits to respectively provide the second and third signals to be demodulated by either the second or third circuits, wherein the second circuit includes a decoder to detect the second frequency of and to demodulate the second signal provided by the analog unit, and wherein the third circuit

includes a decoder to detect the third frequency of and to demodulate the third signal provided by the analog unit (Fig.4-5, Illustrate and described the limitation and for the skill in the art that inherently decoder to demodulate signal provided by the analog unit).

Consider **claim 13**. Ward teaches the transponder of claim 8 wherein the second circuit includes:

a first filter centered at the second frequency to filter the second signal; and

a first decoder coupled to the first filter to demodulate the filtered second signal, and wherein the third circuit includes:

a second filter centered at the third frequency to filter the third signal; and

a second decoder coupled to the second filter to demodulate the filtered third signal (Fig.4-5 Illustrate and described the limitation wherein filter No.160/342 centered at the second frequency and the third frequency).

Consider **claim 14**. Ward teaches the transponder of claim 13 wherein the first decoder comprises a phase shift-type decoder, and wherein the second decoder comprises an amplitude shift-type decoder (Fig. 3-4, Illustrate decoder 180/346 as a phase shift-type decoder and second decoder 190/348 as amplitude shift-type decoder).

Consider **claims 17, 20**. Ward teaches the method of claim 16 wherein distinguishing the received third signal from the second signal includes detecting whether a received signal is the third signal or the second signal based on the

frequency of the received signal by using parallel decoders, one of which decodes based on the second frequency and the other one of which decodes based on the third frequency (Fig.4-5, Illustrate parallel decoders180/346 and 190/348 wherein distinguishing signal).

Consider **claim 18**. Ward teaches the method of claim 16 wherein distinguishing the received third signal from the second signal includes detecting, filtering a received signal to determine whether it is the third signal or the second signal based on the frequency of the received signal and using frequency bands centered on the second and third frequencies, the method further comprising decoding the filtered signal (Fig.4-5, Illustrate and described No.160/342 as filters and contain decoding the filtered signal)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3-4, 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over MacLellan et al. (Patent No. 6,456,668) in view of Ward, Jr. (Patent No. 6,943,680).

Consider **claim 3**. MacLellan teach the limitation of claims as discuss **but silent on** the transponder of claim 2 wherein said demodulator comprises two parallel

branches, each having a filter respectively centered on the second and third frequencies, each filter being associated with a digital decoder.

In an analogous art, Ward teach "Identification system interrogator". Further, **Ward teaches** the transponder of claim 2 wherein said demodulator comprises two parallel branches, each having a filter respectively centered on the second and third frequencies, each filter being associated with a digital decoder (Abstract, C7, L26-57, Fig.4-5 Illustrate No.180/346 and No.190/348 as read on demodulator comprises two parallel branches and contain filter No.160/342 which associated with a digital decode).

Therefore, it would have been obvious at the time that the invention was made that person having ordinary skill in the art to modify MacLellan and Ward system, such that transponder contain demodulator with two parallel branches, each having a filter respectively centered on the second and third frequencies, each filter being associated with a digital decoder to provide means for speed up data transmission.

Consider **claim 4**. Ward teaches the transponder of claim 3 wherein a first decoder associated with the filter centered on the back-modulation frequency is a decoder of phase shift type, a second decoder associated with the third frequency being a decoder of amplitude shift type (C9, L56-67, C10-L1-20, Fig.4-5 Illustrate No.180/346 as read on first decoder and No.190/348 as read on second decoder).

Consider **claim 6**. Ward teach the system of claim 5 wherein each transponder comprises separate demodulators and decoders respectively dedicated to reception of

signals transmitted by another transponder and to the reception of signals transmitted by the read/write terminal (Fig.4-5, Illustrate separate demodulators and decoders).

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over MacLellan et al. (Patent No. 6,456,668) in view of Caronni et al. (Patent No. 6,920,330).

Consider **claim 7**. MacLellan teach the limitation of claim as discuss **but silent on** the system of claim 5 wherein the first frequency is 13.56 MHz, the second frequency being 847.5 kHz, and the third frequency being 106.5 kHz.

In an analogous art, Caronni teaches "Apparatus and method for the use of position information in wireless applications". Further, **Caronni teaches** the system of claim 5 wherein the first frequency is 13.56 MHz, the second frequency being 847.5 kHz, and the third frequency being 106.5 kHz (C2, L41-55 teach the transponder operating frequency within range of limitation).

Therefore, it would have been obvious at the time that the invention was made that person having ordinary skill in the art to modify MacLellan and Caronni system, such that the system wherein the first frequency is 13.56 MHz, the second frequency being 847.5 kHz, and the third frequency being 106.5 kHz to provide means for the system can be flexibility and capability operating frequency.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ward, Jr. (Patent No. 6,943,680) in view of Caronni et al. (Patent No. 6,920,330).

Consider **claim 15**. Ward teach the limitation of claim as discuss above **but silent on** the transponder of claim 8 wherein the first frequency is higher than the second frequency, and wherein the second frequency is higher than the third frequency.

In an analogous art, Caronni teaches "Apparatus and method for the use of position information in wireless applications". Further, **Caronni teaches** the transponder of claim 8 wherein the first frequency is higher than the second frequency, and wherein the second frequency is higher than the third frequency (C2, L41-55 teach the transponder operating frequency within range of limitation).

Therefore, it would have been obvious at the time that the invention was made that person having ordinary skill in the art to modify Ward and Caronni system, such that the first frequency is higher than the second frequency, and wherein the second frequency is higher than the third frequency to provide means for the system can be flexibility and capability operating frequency.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kiet Doan whose telephone number is 571-272-7863. The examiner can normally be reached on 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kiet Doan
Patent Examiner

GEORGE ENG
SUPERVISORY PATENT EXAMINER